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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,203	09/29/2003	Nicholas I. Buchan	HSJ920030156US1	9945

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INTELLECTUAL PROPERTY LAW OFFICES
1901 S. BASCOM AVENUE, SUITE 660
CAMPBELL, CA 95008

EXAMINER	
GEORGE, PATRICIA ANN	
ART UNIT	**PAPER NUMBER**
1765	

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 10/675,203	**Applicant(s)** BUCHAN ET AL.	
	Examiner Patricia A. George	**Art Unit** 1765	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 02 May 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____months from the mailing date of the final rejection.
   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *1-4,6-14 and 16-20*.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See continuation sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. ☒ Other: See Continuation Sheet.

NADINE G. NORTON
SUPERVISORY PATENT EXAMINER

Continuation of 11. does NOT place the application in condition for allowance because the limitations presented in claims 1 and 11 have already been properly rejected, as well as the limitation presented in all claims dependent on claims 1 and 11.

Continuation of 13. Other: Response to arguments:
Applicants argue, on page 5 that "...those skilled in the art would not understand TiW to be useful as a DRIE-resistant masking material." Examiner maintains that Halahan et al. of USPN 6,897,148 clearly shows TiW is used as a DRIE-resistant masking material. Examiner agree with applicant that the reference cites another function for the TiW, and never explicitly uses the term "mask", the reference does illustrates that the TiW layer functions as a mask to pattern/protect the layer under it by simple concealment and also teaches "the opening may be formed by ...a deep reactive ion etch (DRIE)... ", which ultimately teaches DRIE-resistant masking.
Applicants argue, on page 6, that failure to combine teachings of claim 1 to claim 11 admit failure of teaching toward claim 1. Examiner does not agree, as claim 1 and claim 11 are not interpreted to be the same, otherwise a double patent would have been applied.
Applicants argue that examiners comment that the primary reference uses SiO2 as DRIE resistant material is irrelevent, since proposed amendment claim 5 would be canceled. Examiner comment that proposed amendments will not be entered, thus prior statement about use of SiO2 stands.
Applicants argue, on page 7, that Halahan does not disclose depositing a patterned layer of RIE-resistant material on the layer of DRIE-resistant material. Examiner stands, Halahan discloses depositing a patterned layer of RIE-resistant material (fig. 10, 1010.3) on said layer of DRIE-resistant material (fig. 10, 1010.1) to form a primary mask, Examiner interpret the term "on" to mean - - -used as a function word to indicate position in close proximity - - -(See http://webster.com/dictionary/on section 1A; definition c) - - -
Applicants argue, on page 8, the references do not disclose use of two masks and two separate etch steps. This argument is not comensurate with the scope of the claimed language.
Applicants argue, on page 9, that Examiner is confusing RIE and DRIE process. Examiner understands the difference and provided Halahan as a reference which taugh both. The reference of Matono was used to show it is known that Al2O3 has the capabily of being selectively patterened vertically, by reactive plasma etch methods, selective etching indicating it is resistant to reactieve etching (i.e. RIE).
Applicants argue, on page 11, that current amendments are not found in an existing references. As amendments will not be entered, examination of then will not proceed, thus examiner has no comment to this effect.
Applicants argue on page 12, that reference do not mention the term "DRIE-mask". Examiner would like to assert that said masking function is clearly illustrated, dispite the explicite use of the term.
Applicants argue, on page 13, that use of two separate processes with appropriate masking materials for each separate process can not be infered. This argument is not comensurate with the scope of the claimed language. Applicants continue on to say it is not appropriate to treat any etch stop material as being suitable for primary and secondary masks. Examiner believes the references provides were properly applied, and furthermore, would like to assert that the use of a material as an etch stop layer shows it's resistance capability and function as a mask.
Applicants argue, on page 14, that there is simply no reason to coat an entire surface with DRIE-resistant material, and then apply DRIE to it without patterning it first. Examiner replys that this argument is a negative limitation that is not presented in the claim language. Examiner would also like to respond that the claim language also does not hold a positive limitation which imparts the argument presented. Thus, applicants argument is not comensurate with the scope of the claimed language.